

CLAIMS

We claim:

1. A filter screen for use in filtering water, the filter screen comprising:
a frame;
5 a grid assembly supported by the frame for movement, the grid assembly
including
a continuous unbroken drive chain having a guide link, and
a screen panel coupled to the guide link for selective movement
between an operating condition where the screen panel is fixed relative to the guide
10 link for movement with the guide link and for filtering water and a maintenance
condition where the screen panel is pivotable relative to the guide link to permit
access to the filter screen.

2. The filter screen of claim 1, wherein the grid assembly further includes an
15 additional continuous unbroken drive chain having a guide link, wherein the screen panel
is coupled to the guide link of the additional drive chain for selective movement between
the operating condition where the screen panel is fixed relative to the guide link of the
additional drive chain for movement with the guide link of the additional drive chain and
for filtering water and the maintenance condition where the screen panel is pivotable
20 relative to the guide link of the additional drive chain to permit access to the filter screen.

3. The filter screen of claim 1, wherein the grid assembly further includes a
bushing coupled to the guide link, wherein the screen panel includes an end member
having a hook that engages the bushing in the operating condition and that disengages
25 from the bushing in the maintenance condition.

4. The filter screen of claim 3, wherein the screen panel moves linearly
relative to the guide link to disengage the hook from the bushing in the maintenance
condition.

5. The filter screen of claim 4, wherein the guide link includes a projection,
and wherein the end member includes a slot having a longitudinal axis, the projection
being positioned within the slot such that the screen panel pivots about the projection and
moves linearly along the slot axis in the maintenance condition.

6. The filter screen of claim 5, wherein the guide link includes a hole, and wherein the projection is a fastener positioned in the hole of the guide link.

5 7. The filter screen of claim 5, further comprising a fastener that couples the guide link and the screen panel together in the operating condition.

8. The filter screen of claim 7, wherein the guide link includes a hole, and the end member includes a hole, the fastener being positioned in the hole of the guide link and
10 the hole of the end member in the operating condition.

9. The filter screen of claim 8, wherein the hole of the end member is positioned between the slot and the hook.

10. A grid assembly for use in a filter screen to filter water, the grid assembly comprising:

a continuous unbroken drive chain including a guide link;

5 a screen panel coupled to the guide link for selective movement between an operating condition where the screen panel is fixed relative to the guide link for movement with the guide link and for filtering water and a maintenance condition where the screen panel is pivotable relative to the guide link to permit access to the filter screen.

10 11. The grid assembly of claim 10, further comprising an additional continuous unbroken drive chain including a guide link, wherein the screen panel is coupled to the guide link of the additional drive chain for selective movement between the operating condition where the screen panel is fixed relative to the guide link of the additional drive chain for movement with the guide link of the additional drive chain and for filtering water and the maintenance condition where the screen panel is pivotable relative to the guide
15 link of the additional drive chain to permit access to the filter screen.

20 12. The grid assembly of claim 10, further comprising a bushing coupled to the guide link, wherein the screen panel includes an end member having a hook that engages the bushing in the operating condition and that disengages from the bushing in the maintenance condition.

25 13. The grid assembly of claim 12, wherein the screen panel moves linearly relative to the guide link to disengage the hook from the bushing in the maintenance condition.

30 14. The grid assembly of claim 13, wherein the guide link includes a projection, and wherein the end member includes a slot having a longitudinal axis, the projection being positioned within the slot such that the screen panel pivots about the projection and moves linearly along the slot axis in the maintenance condition.

15. The grid assembly of claim 14, wherein the guide link includes a hole, and wherein the projection is a fastener positioned in the hole of the guide link.

16. The grid assembly of claim 14, further comprising a fastener that couples the guide link and the screen panel together in the operating condition.

17. The grid assembly of claim 16, wherein the guide link includes a hole, and
5 the end member includes a hole, the fastener being positioned in the hole of the guide link and the hole of the end member in the operating condition.

18. The grid assembly of claim 17, wherein the hole of the end member is positioned between the slot and the hook.